



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,600	01/12/2004	Dieter Jahn	KOL/216/US	9545
2543	7590	09/12/2005	EXAMINER	
ALIX YALE & RISTAS LLP 750 MAIN STREET SUITE 1400 HARTFORD, CT 06103			LANDRUM, EDWARD F	
			ART UNIT	PAPER NUMBER
			3724	

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,600

Applicant(s)

JAHN, DIETER

Examiner

Edward F. Landrum

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because the abstract exceeds the 150 word limit and uses legal phraseology such as "means" and "said". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "few" in claim 1 is a relative term which renders the claim indefinite. The term "few" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term allows the score lines width to be less than the width of the saw blade. The disclosure states the cutting width of the scoring tool should be .2 to 1 mm wider than the separating saw cut (Page 4, lines 17-18).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

Art Unit: 3724

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 6-8, 11-13, and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (U.S Patent No. 4,215,613) in view of Mills (U.S Patent No. 4,132,253).

Anderson teaches a sawing device having a conveying apparatus for continuously transporting material to be cut (Col. 4, lines 22-33). The cutting apparatus has a saw blade (47) that is driven in the same direction as the work being cut (see Figure 4), and said saw's axis of rotation is disposed above the plane of conveyance of the material being cut. The saw blade has a cutting width through the material. Furthermore, Anderson teaches a scoring tool (46), which rotates in the same direction as the direction of conveyance (see figure 4), for the underside of the material with at least one left hand and one right hand laterally spaced, parallel scoring lines. Moreover, Anderson teaches that the scoring knife produces a circle of flight of knife blades which are separated from each other by a cut-out portion and have a cutting line inclined with respect to the knife blades, in such a way that a rising cutting line is produced in the course of the scoring-in operation (see Figure 4).

Anderson teaches all of the elements of the current invention as stated above except the sawing apparatus having a conveying system comprising of two side-by-side chain conveyors associated side-by-side pressure applying belts fir holding down material being cut against the chain conveyors

Mills teaches a sawing apparatus having a conveying system comprising of two side-by-side chain conveyors (20) and associated side-by-side pressure applying belts (30) for holding the material being cut down against the chain.

It would have been obvious to have modified Anderson to incorporate the teachings of Mills to create an apparatus which could effectively restrict the movement of a material being cut while conveying it through a set of saws, while using multiple rows of scoring knives to effectively score a material in preparation for being cut. Chain and belt conveyor systems are very common modes of conveyance used by cutting apparatuses.

Regarding claim 6, the modified device of Anderson fails to explicitly teach the scoring being .2 to 1 mm wider than the width of the saw blade. However, the examiner takes Official Notice on providing a width of score lines greater than that of the saw blade as old and well known in the art in order to provide a cleaner cut.

Regarding claims 7, 8, 17, and 18, the modified device of Anderson fails to teach the transverse and vertical adjustment of the scoring tool. However, the examiner takes Official Notice that the use of transversely and vertically adjustable scoring tools is old and well known in a sawing art for the purpose of setting a depth of cut and positioning the scoring tool to a line of cut.

6. Claims 4, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Mills in further view of Gayoso (U.S Patent No. 6,364,590), and Lee (U.S Patent No. 5,316,061).

Anderson and Mills teach all of the elements of the current invention as stated above except that the circular scoring knife was formed of two knife blades which are clamped to one another in a spaced relationship by means of an interchangeable intermediate shim piece for setting the distance between them, and thereby setting a cutting width defining the left and right scoring lines of said circular scoring knife.

Gayoso teaches the use of a pair of scoring tools (70) for scoring a book (see Figure 3).

Lee teaches (Col. 2, lines 40-45; also see Figures 1 and 2) the use of shims (10, 12, 14, 16, and 18) to set a specific cutting distance between two rotary blades (24).

It would have been obvious to have modified the modified device of Anderson to incorporate the teachings of Gayoso and Lee to allow a user to set a specific distance between two scoring blades, preferably .2 to 1mm wider than the cutting width of the circular saw blade, to allow the same apparatus to be usable for scoring and cutting operations of different sizes. Thereby creating a set of score lines, produced by rotary blades generating a rising cutting line, laterally spaced to any desired width.

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Mills in further view of Gayoso.

Anderson and Mills teach all of the elements of the current invention as stated above except that the circular scoring knife was formed of two knife blades in a spaced relationship thereby setting a cutting width defining the left and right scoring lines of said circular scoring knife.

Gayoso teaches the use of a pair of scoring tools (70) for scoring a book (see Figure 3).

It would have been obvious to have modified the modified device of Anderson to incorporate the teachings of Gayoso to use a pair of scoring devices if necessary to effectively score the work piece.

Regarding claim 16, the modified device of Anderson fails to explicitly teach the scoring being .2 to 1 mm wider than the width of the saw blade. However, the examiner takes Official Notice on providing a width of score lines greater than that of the saw blade in order to provide a cleaner cut.

8. Claims 9 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Mills in further view of Humphrey (U.S Patent No. 2,893,446).

Anderson and Mills teach all of the elements of the current invention as stated above except the use of a holding-down rail acting on the upper side of a material during the scoring operation of the scoring tool.

Humphrey teaches (Col. 3, 26-35; also see Figures 1 and 2) the use of a rail system to forcibly clamp down on a material while it is being cut.

It would have been obvious to have modified the modified device of Anderson to incorporate the teachings of Humphrey to provide a constant force through the use of a holding-down rail to create a consistent depth of cut while scoring a material. Belts could deflect when introduced to a force normal to their plane of movement.

9. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Mills in further view of Puzio et al (U.S Patent No. 6,131,629).

Anderson and Mills teach all of the elements of the current invention as stated above except the use of a counterplate having an incision wider than the lateral space between the scoring lines for the passage of the circular saw blade, and additional apertures alongside, before and after the passage for the purpose of extracting saw shaving occurring between the chain conveyers.

Puzio teaches the use of a counterplate (14) having incision (26) to help in the collection of dust into a dust collection device (Col 5. lines, 25-28; also see Figure 19).

It would have been obvious to have modified the modified device of Anderson to incorporate the teachings of Puzio to provide the cutting apparatus with a counterplate between the chain conveyors to be used as a hard surface to counter the force exerted by the saw blade on the material being cut. Furthermore, dust collection slots before and after the saw blade slot would provide an easy way to collect sawdust as to help prevent the sawdust from entering and breaking critical moving parts.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fogg (3,570,350), Sarring et al (U.S Patent No. 3,146,650), and McCain (U.S Patent No. 3,207,017) teach cutting apparatuses. Delcellier (U.S Patent No. 3,310,080), and Heldmann (U.S Patent No. 1,088,573) teach chain conveyors with lugs. Bowling (U.S Patent No. 2,818,094), and McCord et al (U.S Patent No. 5,309,962) teach dado cutters. Thrasher (U.S Patent No. 3,568,738), McCaffery (U.S Patent No. 2,941,560), and Pfenning et al (U.S Patent No. 3,757,625) teach the use of a device to

forcibly push down on a material being cut. Gallagher (U.S Patent No. 3,763,748), Ceroll et al (U.S Publication No. 2002/0005103), and Garuglieri (U.S Patent No. 5,896,798) teach the use of a plate to support material being cut and said plate having an opening for a rotary blade. Anderson et al (U.S Patent No. 4,215,613), and Gayoso (U.S Patent No. 6,364,590) teach scoring apparatuses. Herman (U.S Patent No. 6,134,999) teaches side-by-side pressure applying belts. Hirahata et al (U.S Patent No. 6,341,548), and Gass et al (U.S Publication No. 2002/0017181) teach rotary saw blade-positioning systems.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward F. Landrum whose telephone number is 571-272-5567. The examiner can normally be reached on Monday-Friday 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap can be reached on 571-272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/755,600

Page 9

Art Unit: 3724

EFL

8/26/2005



STEPHEN CHOI
PRIMARY EXAMINER